AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 16 (Canceled)

Claim 17 (Currently Amended): A semiconductor light-receiving device for a high-speed and large-capacity optical fiber communication system comprising:

a) a semi-insulating substrate;

b) a semiconductor layer of a first conduction type that is formed on the semi-insulating substrate;

c) a buffer layer of the first conduction type that is formed on the semiconductor layer;

d) a light absorption layer that is formed on the buffer layer and generates carriers in accordance with incident light;

e) a semiconductor layer of a second conduction type that is formed on the light absorption layer; and

f) a high-concentration semiconductor intermediate tunneling layer of the first conduction type that is interposed between the buffer layer and the light absorption layer and has a higher

impurity concentration than the buffer layer, the semiconductor intermediate tunneling layer allowing electrons to pass therethrough to the buffer layer due to a tunnel effect, wherein said semi-insulating substrate and layers b) - f) are arranged to form a semiconductor light-receiving device, the high-concentration semiconductor intermediate tunneling layer and the buffer layer being made of an identical material.

Claim 18 (Original): The semiconductor light-receiving device as claimed in claim 17, wherein the impurity concentration of the buffer layer is lower than 1×10^{17} cm^{-3}.

Claim 19 (Previously Presented): The semiconductor light-receiving device as claimed in claim 17, wherein the high-concentration semiconductor intermediate tunneling layer has an impurity concentration of 2×10^{18} cm^{-3}, and a film thickness of 100 nm or smaller.

Claim 20 (Previously Presented): The semiconductor light-receiving device as claimed in claim 17, further comprising a contact layer of the first conduction type that is interposed between the semi-insulating substrate and the buffer layer, the contact layer having a high impurity concentration, with a predetermined potential being supplied to the contact layer through an electrode connected to the contact layer.

Claim 21 (Original): The semiconductor light-receiving device as claimed in claim 17, wherein at least the light absorption layer and the semiconductor layer of the second conduction type form a mesa structure, with light entering the light absorption layer through a side surface of the light absorption layer that is exposed in a process of forming the mesa structure.

Claim 22 (Canceled)

Claim 23 (Currently Amended): A semiconductor light-receiving device for a high-speed and large-capacity optical fiber communication system comprising:

a) a semiconductor substrate of a first conduction type;

b) a buffer layer of the first conduction type that is formed on the semiconductor substrate and has a lower impurity concentration than the semiconductor substrate;

c) a light absorption layer that is formed on the buffer layer and generates carriers in accordance with incident light;

d) a semiconductor layer of a second conduction type that is formed on the light absorption layer; and

e) a high-concentration semiconductor intermediate tunneling layer of the first conduction type that is interposed between the buffer layer and the light absorption layer and has a higher impurity concentration than the buffer layer, the semiconductor intermediate tunneling layer allowing

electrons to pass therethrough to the buffer layer due to a tunnel effect, wherein said semiconductor substrate and layers b) - e) are arranged to form a semiconductor light-receiving device, the high-concentration semiconductor intermediate tunneling layer and the buffer layer being made of an identical material.

Claim 24 (New): The semiconductor light-receiving device as claimed in claim 17, wherein the identical material is InP.

Claim 25 (New): The semiconductor light-receiving device as claimed in claim 23, wherein the identical material is InP.